## Claims:

1. Acetal of formula I:

Ι

in which

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the radicals  $R^1$  to  $R^6$  independently of one another are each hydrogen, methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, sec-butyl or tert-butyl,

15 n = 0 or 1, and

there is a single bond or double bond at the location of a broken line between two C atoms,

any double bond present in the chain linking the aliphatic ring to the acetal group having the E or Z configuration,

with the proviso that

- 25 the number of double bonds incorporating a C atom of the aliphatic ring is 0 or 1, and
  - the number of double bonds not incorporating a C atom of the aliphatic ring is 0 or 1.

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2. Acetal according to Claim 1 in which the radicals  ${\bf R}^1$  to  ${\bf R}^6$  independently of one another are each hydrogen or methyl.

3. Acetal according to Claim 1 or 2 which has formula IA or IB below:

IB

the double bond in the chain linking the aliphatic ring to the acetal group having the E or Z configuration in each case.

IA

4. Acetal according to Claim 3 which is 2-[1-methyl-3-(2,6,6-trimethyl-1-cyclohexen-1-yl)allyl]-1,3-dioxolane

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2-[1-methyl-3-(2,6,6-trimethyl-1-cyclohexen-1-yl)propenyl]-1,3-dioxolane.

- 20 5. Acetal according to one of Claims 1-4 which can be prepared by the acetalization of 2-methyl-4-(2,6,6-trimethyl-1-cyclohexen-1-yl)-2-butenal.
- 6. Mixture of two or more acetals according to one of Claims 1-4.
  - 7. Use of an acetal according to one of Claims 1-5 or a mixture of two or more acetals according to Claim 6 (a) as a fragrance, or (b) for the preparation of a mixture of fragrances or a perfume.
  - 8. Product comprising

- a carrier or a substrate, and
- a sensorially effective amount, in direct contact therewith, of an acetal according to one of Claims 1-5 or a mixture of two or more acetals according to Claim 6.
- Product according to Claim 8 selected from the group comprising alcoholic perfumes, body care products and household cleaning or care products.
- Product according to Claim 9, characterized in that the body care products are selected from the group comprising soaps, shower gels, shampoos, bath additives,
   skin creams, body lotions and deodorants, and the cleaning products are selected from the group comprising detergents, fabric softeners, air purifiers and cleaners.
- 11. Process for the preparation of an acetal according to
  20 one of Claims 1-5 or a mixture according to Claim 6,
  characterized in that 2-methyl-4-(2,6,6-trimethyl-1cyclohexen-1-yl)-2-butenal is reacted with an aliphatic
  1,2- or 1,3-diol under acid catalysis and water separation.
- 12. Process according to Claim 9 wherein the water formed in the reaction is removed by (a) distillation,(b) azeotropic distillation, or (c) azeotropic distillation together with an entraining agent.